REMARKS

Claims 1 – 13 are pending and under consideration in the above-identified application.

In the Office Action, Claims 1 – 13 were rejected.

In this Amendment, Claims 2, 4, 6 and 7 are amended, and Claims 1 and 8 are cancelled. No new matter has been introduced as a result of this amendment.

Accordingly, Claims 2 – 7 and 9 – 13 are now at issue.

I. Priority Claim

The Examiner has requested that Applicants submit a reference to the prior applications to be inserted as the first sentence(s) of the instant application or in an application data sheet (37 CFR 1.76), if Applicants intend to rely on the filing date of the prior applications and to benefit claim under 35 U.S.C. 119(e), 120, 121, or 365(c).

In response, Applicants submit that the requested reference was included in the Preliminary Amendment filed with the Patent Application on February 10, 2004. Applicants point the Examiner to the U.S.P.T.O Image File Wrapper for the instant patent application.

II. 35 U.S.C. § 102 Anticipation Rejection of Claims

Claims 1-5 were rejected under 35 U.S.C. § 102(e) as being anticipated by Ting et al. ("Ting") (U.S. Patent No. 6,077,412).

Claim 1 has been cancelled and Claim 2 has been amended by incorporating all of the substantive limitations of Claim 1.

Claim 2 is directed to a semiconductor manufacturing apparatus, which comprises an electrolytic plating chamber, an electrolytic polishing chamber, and a conveying chamber having installed therein a conveying instrument responsible for loading/unloading of the substrate to or from the electrolytic plating chamber and to or from the electrolytic polishing chamber, and being connected respectively to the electrolytic plating chamber and the electrolytic polishing chamber. The electrolytic plating chamber comprises a holder for holding the substrate, a cup provided so as to oppose to the holder and is capable of forming a closed space, into which an electrolytic plating solution can be filled, together with the substrate held by the holder, and a nozzle for supplying a process liquid onto a surface of the substrate held by the holder.

In contrast, Ting fails to a nozzle for supplying a process liquid onto a surface of the substrate held by the holder. The Examiner states that Ting discloses a nozzle 18 for supplying a process liquid on a surface of the substrate held by the holder. However, Ting states that:

> "Referring to FIGS. 1 and 2, a processing chamber 10 of the preferred embodiment is shown. FIG. 2 is a cut-away view of the chamber 10 shown in FIG. 1. The chamber 10 includes an outer casing 11, inner fluid sleeve 12, wafer support (also referred to as wafer platen or platform) 13, anode electrode 14, cathode electrodes 15, fluid delivery (and anode) shaft 16, wafer rotating shaft 17, two cleansing manifolds 18 and 19, backside purge manifold 20, and covers 21 and 22. It is appreciated that not all of these elements are needed for the practice of the present invention."

See column 4, lines 32 – 41, and that:

> "Referring back to FIGS. 5 and 6, several other features of the chamber 10 are shown. The three ring-shaped manifolds 18-20 are utilized to inject DI water and/or nitrogen at the particular location where they are located. The upper manifold 18 is located at the upper vicinity of the chamber 10 for spraying DI water downward to wash away the remaining electrolyte from the walls of the casing 11 and sleeve 12. The lower manifold 19 is located around the lower shaft 17 in the vicinity of the wafer support 13, so that DI water can be sprayed to clean any remaining fluid on or around the wafer support 13, when the wafer support 13 is in the lower position. The cleaning is typically performed with the wafer support 13 in the lower position. The two cleaning manifolds 18 and 19 also inject N.sub.2 as well to provide the drying of the interior of the chamber, which forms a secondary containment region 29. The two manifolds 18 and 19 are positioned at their respective locations by support members (not shown) attached to the casing cover 22, so that when the casing cover 22 is removed, the manifolds 18 and 19, along with the sleeve 12 can be removed from the chamber 10 as a single attached unit. The fluid (water and N.sub.2) couplings to the manifolds 18 and 19 are also not shown, but are present and such lines will extend out from the casing 11, generally through the top cover 21 or 22 or integrated within shaft 16."

(See column 11, lines 15 – 38). Thus, in Ting the nozzle 18 is not used for supplying a process liquid onto a surface of the substrate held by the holder, but rather for cleansing the upper vicinity of the chamber 10 for spraying DI water downward to wash away the remaining electrolyte from the walls of the casing 11 and sleeve 12. Moreover, the nozzle 18 is located at the upper vicinity of the chamber 10, rather than supported by the support (holder of the wafer).

Thus, Ting fails to anticipate every limitation of Claim 2. As such, Claim 2 is patentable over Ting, as is dependent Claim 3 for at least the same reasons.

Claim 4 has been amended in a similar fashion to Claim 2. Claim 4 recites the same distinguishable limitations as those of Claim 2. Thus, Claim 4 is also patentable over Ting, as is dependent Claim 5 for at least the same reasons.

III. 35 U.S.C. § 103 Obviousness Rejection of Claims

Claims 6-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ting in view of Maydan et al. ("Maydan") (U.S. Patent No. 6,503,375).

Claim 6 is directed to a semiconductor manufacturing apparatus, which comprises an electrolytic plating chamber, an electrolytic polishing chamber, an electroless plating chamber, an annealing chamber, and a conveying chamber.

Amended Claim 6 recites that the conveying chamber is connected with a liquid treatment chamber for supplying a process liquid. The liquid treatment chamber comprises a holder for holding the substrate, and a nozzle for supplying the process liquid onto a surface of the substrate held by the holder.

Thus, amended Claim 6 recites the same distinguishable limitation related to the nozzle and the holder as do Claims 2 and 4.

Maydan also does not teach or suggest a liquid treatment chamber that comprises a holder for holding the substrate, and a nozzle for supplying the process liquid onto a surface of the substrate held by the holder. Therefore, Ting and Maydan may not be properly combined to reject Claim 6.

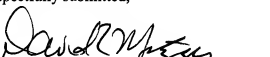
Thus, Claim 6 is patentable over Ting in view of Maydan, as are dependent Claims 7, and 9 – 13 for at least the same reasons.

Accordingly, Applicants respectfully request that these claim rejections be withdrawn.

IV. **Conclusion**

In view of the foregoing, Applicant submits that the application is in condition for allowance. Notice to that effect is requested.

Respectfully submitted,

Dated: November 9, 2006 By: 

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